ADVISORY COMMITTEE ON THE ELECTRONIC RECORDS ARCHIVES
MEETING NO. 3
NATIONAL ARCHIVES BUILDING

MINUTES
DAY 1 OF 2
NOVEMBER 15, 2006

In accordance with the provisions of Public Law 92-463, the meeting was open to the public from 9:00 a.m. to 5:00 p.m. The meeting commenced at 9:12 a.m.

COMMITTEE MEMBERS – FIVE (5) MEMBERS WERE NOT PRESENT.

Name	Organization
Lewis Bellardo	National Archives and Records Administration
Laura E. Campbell	Library of Congress
David Carmicheal – not present	Georgia Archives
Sharon Dawes	Center for Technology in Government
Luciana Duranti – not present	University of British Columbia
Dr. Richard Fennell	Administrative Office of the U.S. Courts
Daniel Greenstein – not present	University of California
Dr. Chris Geer – sitting in for Dr. Daniel Atkins	University of Michigan
Jerry Handfield	Washington State Archives
Robert Horton	Minnesota Historical Society
Dr. Robert E. Kahn	Corp. for National Research Initiatives
Andy Maltz	Academy of Motion Picture Arts and Sciences
Richard Pearce-Moses	Digital Government Information
John T. Phillips	Information Technology Decisions
Dr. Dan Reed – not present	University of North Carolina at Chapel Hill
Adrienne Reagins	National Archives and Records Administration
Jonathan M. Redgrave – not present	Redgrave Daley Ragan & Wagner LLP
David Rencher	Federation of Genealogical Societies
Richard L. Testa	U.S. Air Force
Dr. Ken Thibodeau	National Archives and Records Administration
Allen Weinstein	National Archives and Records Administration
Dr. Kelly Woestman	Pittsburgh State University

1. Welcome: Dr. Allen Weinstein, Archivist of the United States

Allen Weinstein, Archivist of the United States, introduced himself and welcomed the Committee members back to the National Archives and Records Administration (NARA). He thanked the members for their participation, and announced that he would review a few briefing points then turn the meeting over to the Chairman, Dr. Robert Kahn.

Beginning with funding activities, Allen Weinstein reported that the current budget realities have caused NARA to ask Lockheed Martin Corporation (LMC) to reassess their scope for the first Increment of the Electronic Records Archives (ERA). The expected budget of 134 million was scaled back to an estimated 63 million. In addition, NARA is still waiting for Congress to approve the 2007 budget and it is anticipated that the agency will continue to operate under a continuing resolution until February or March.

Allen Weinstein announced that the first ERA facility will be located in West Virginia at the Allegany Ballistic Rocket Center. He indicated LMC has made significant progress in developing the first increment and that the program had just completed the Critical Design Review (CDR) milestone. Allen Weinstein concluded by encouraging the ACERA Committee members to contribute their wisdom and criticism to NARA as they discuss ERA Program activities including what they see as right as well as wrong.

2. Comments by the Chair: Dr. Robert Kahn

Meeting Overview

Robert Kahn reviewed the meeting agenda. On Day One, discussions should focus on a review of the ERA Design Document and what the document conveys to each Committee member. On Day Two, agenda will feature a presentation on DoD's Advanced Distribution Learning (ADL) Program and Robert Kahn asked the Committee members to think how some of the technologies used in the ADL Program may be used by ERA going forward. One benefit that ACERA could provide to NARA is a long range view for ERA because LMC is focused on the near term.

Next, the Committee members were asked to introduce themselves. Chris Geer announced he is sitting in for Dr. Daniel Atkins from the University of Michigan. Dr. Kahn added that the working group is expected to publish a report to the Science Foundation by early summer and he would very much like a presentation from that working group once the report is published.

Adoption of Minutes (April 5-6th Meeting)

Robert Kahn asked for comments, corrections, or concerns with the minutes from the previous April 5-6th ACERA meeting. A motion was made to accept the minutes and it was seconded.

3. Disclosure Discussion – Chris Runkel

Financial Disclosures

Chris Runkel introduced himself as NARA's Legal Counsel and Ethics Officer. He stated that the information he would provide in the next session would meet his requirement to give the Advisory Committee a Summary Ethical Training session. An Ethical Training document was then distributed to the Committee members.

Highlights from the Ethical Training Session include:

- The Committee members are Special Government Employees;
- There is a shortened Disclosure Form that each member should fill out;
- The form ensures there are no conflicts of interest with LMC stock or employment positions in conflict with the Advisory Committee activities;
- Discussion on the Principles (Standards) of Ethical Conduct;
- Conflicts of Interest pertaining to Bribery, Financial Interests and Post Employment;
- Chris Runkel is the primary point of contact and David Davenport may also be contacted for Ethical or Disclosure information;
- Particular matters related to some connection to the LMC or contracts relevant to ERA;
- Members that speak at colleges or public events must make a disclaimer that they are speaking in his/her own behalf and not for the ACERA Committee;
- Members need to be conscious of stock held in his/her name; and
- Members should be aware of the Federal Acquisition Regulation (FAR) laws.

Ken Thibodeau, Robert Kahn, and Lew Bellardo reflected on of their previous experience with Conflict of Interest matters. Chris Runkel concluded by encouraging each member to fill out the shortened form and to disclose any information if there is the slightest Conflict of Interest doubt.

Meeting took a 15 minute break and resumed at 10:30 am.

4. Review of April Meeting Minutes and Action Items

Dr. Kahn reviewed the list of open action items provided in the binder. Please see the remaining open action items listed in the ACERA Open Action Items file posted on Core.gov.

5. ERA Program Status – Ken Thibodeau

Program Management

Ken Thibodeau referred the Committee to the organization chart on page three (3) of the ACERA binder and announced that the ERA Program Management Office was recently reorganized. A new Customer Support and Logistics Division was created in order to provide user and logistical support.

The ERA Program Office and Support Team (POST) contract was up for renewal and NARA released a Request for Quotes (RFQ) in order to recomplete the contract. Thibodeau is seeking a Deputy to help shoulder administration of the acquisition as well as a system architect to support Systems Engineering.

Budget, Audit

Budget-

The ERA budget is a separate line item on NARA's budget. The LMC contract first exercises a two (2) year option that was fortunately funded with three (3) year funding from Congress. Thibodeau proceeded to explain the complexities of managing the program as funding expectations continually change due to Congressional constraints.

Highlights from the Budget Discussion included the following.

- LMC contract budget was reduced to approximately 63 million from 134 million
- NARA has received 43million so far and expects additional funding in the December time frame
- Thibodeau spent most of this year securing funding and replaning the LMC contract.
- Kahn requested to know what functionality will not be provided in Increment One, Release Two due to the funding constraints and Thibodeau took an action to provide the information. (**Action Item #1:** Ken will provide Dr. Kahn information on what functionality will not be provided in Increment One, Release Two due to funding constraints.)
- ERA Increment One, Release Two will provide basic functionality and business rules
- Increment One, Release Three will support the development and approval of scheduling
- Only four (4) agencies will use the system in the first roll out:
    * US Patent and Trademark Office (PTO)
    * Department of Navy, Naval Oceanographic Office
    * National Nuclear Security
    * Bureau of Labor Statistics
- The only impact to the schedule so far is the CDR was moved back by only one (1) month. LMC had planned a lot more time for testing because originally this increment was going to a bigger system.
- Currently, LMC is technically working at risk until December 4th.
- NARA has submitted a letter to LMC saying it will pay them when they get funding
- The total risk to LMC is 10M due to equipment costs.

- The four (4) agencies were chosen to participate in Increment One, Release Two based on specific criteria, most importantly if they already have scheduled electronic records and proposed records schedules. The decision was up to the line offices but the Program Office made recommendations.

- Next consideration for agency involvement is getting ready for the White House records of the George W. Bush Administration expected to arrive at NARA soon after the upcoming election in 2008.

- FY06 appropriated funding is also going to build the Stennis site that NARA is renting. NARA is looking into using Stennis as additional testing capability.

- Due to the constant funding considerations, NARA is looking to break out the ERA system builds into bundles of functionality to avoid a Replan exercise with LMC every year.

Audit-

The Government Accountability Oversight (GAO) requires NARA to submit a spending plan. Weinstein speculates that this requirement is the result of NARA paying the price of other IT system failures.

Thibodeau added that NARA has been given no formal guidance other than to look at the Internal Revenue Services (IRS) plan. NARA did consult the IRS plan but GAO indicated they needed more detail. The Office of Management and Budget (OMB) directed GAO to critique the ERA Program because they identified it as an agency level risk and they want to see more coordination with the Enterprise Architecture and other NARA systems.

NARA is working to understand what GAO wants to see. For example, Congress has indicated they want to see deliverables by fiscal year for multiyear programs because Congress operates on a fiscal year.

Sharon Dawes: What is Congress's role?

Thibodeau: GAO will tell Congress if NARA is acceptable. OMB is curious about how NARA will handle Bush's records, particularly the long range thinking. NARA has either already acted on any perceived criticism or we've given GAO an answer on what NARA will do to correct it. Approximately, 80% of my time is spent on funding/contract issues.

Chris Geer: Has ACERA looked at Risk Management?

Kahn: ACERA is better at providing a technical look.

Thibodeau: There is a Risk Review Team (RRT) within ERA. There is a Risk Review Board (RRB) at the NARA level and LMC has its own Risk Program.

Martha Morphy: The RRB reports to the ERA Oversight Group to look at the program on a weekly basis.

Kahn: Is this technical or management oversight?

Thibodeau: Management. It would be nice if ACERA looks at risks outside of Federal Government.

Kahn: There should be a concern with the performance of the system the day it is deployed. Topics to consider are searching and metadata strategies. The risks on the technical side are most important.

Laura Campbell: If budget is always going to be constrained then break the system into smaller modules.

Ken: That is was what I meant when I talked about bundles.

Laura: Break it out. Conduct a technical reconfiguration.

Martha: We've done that verbally with the OMB by breaking ERA out into components but we haven't done that in the documentation.

Laura: Change verbiage in documentation from integrated system to system.

Allen Weinstein: OMB is looking at the near term, only at NARA handling Bush's records.

Dawes: What are your top five (5) risks? (Continuation from previous conversation about the importance of identifying and socializing ERA's risks)

Ken: It's not the top five (5) risks but what are the critical points of failure? (Stennis – rent, floor strength)

Handfield: The real risk is managing expectations, putting value on public exposure to identified risks.

Allen Weinstein: Maybe the ACERA Committee can help elevate the funding problem to Congress.

Kahn: How would you see this happening?

Dawes: A letter from the ACERA Committee.

Kahn: Proposed working with the Archivist to draft a letter that would be discussed by the Committee.

Maltz: At what point do you know that if you've scaled down the system so much that it will fail?

Ken: Catastrophic system failure. For Increment 1, there is no preservation. It saves bits only. Real preservation is pushed out three (3) years. If we don't get funding, there is the potential that the system will never do what it was originally intended to do.

Kahn: Access is critically important. You need to demonstrate how the system will make information accessible. Also, performance issues are important.

Maltz: Target for when the Bush records come in, that's the anchor.

Pearce-Moses: Electronic records are more expensive that paper. Congress doesn't seem to understand it. We'll be dealing with this issue of funding for a long time. Building the system is not a one (1) time cost. Congress needs to be educated about this.

Lew: If history is precedence, law suits will come along with the Bush records.

Redgrave: It is a critical mission failure if NARA doesn't get the funding problem corrected. NARA needs to demonstrate failures if they don't get the funding. You need to demonstrate failures if researchers can't access geographical data, failures if FOIAs are granted, failures if documents aren't available for litigations and failures if NARA can't preserve records of the public. Must change the way Congress and administration funds and manages this program or you're looking at failure.

Allen Weinstein: I gave a tour to 10 Congressmen last night. We are a cutting edge institution not sleepy.

Horton: Change from integrated system to service. (Horton is suggesting a new lobbying strategy). Preservation is intangible. You need to have real number. State Archives can understand defined bundles.

Testa: Present bundles along with a spiral plan of release. Tie each bundle to what's being delivered and map it to the cost. Make it clear to Congress what they're not getting in each bundle if the money is not allocated.

Kahn: At 9/07, the roll out will not be usable by many people. Even years later, ERA may not be ready for the public. The message to the outside world is that ERA will not be made public until such and such time. Need to make a pitch to the public that ERA will be a warehouse for a while and made available to the public later. NARA needs to set the agenda, rather than reacting to the agenda of others.

Break for lunch…

1:30 Meeting Adjourns

IV&V Presentation

Carol Harris, the Independent Verification and Validation (IV&V) Contracting Officer Representative for the ERA Program and Patricia Gableman, Northrop Grumman (NG) IV&V Project Manager begin the afternoon session with a presentation on the IV&V tasks and findings reported during the ERA requirements phase.

Please see the presentation slides posted on the Core.gov site.

Highlights from the IV&V presentation include:

- Ms. Harris introduced the presentation by providing a definition for IV&V and discussing the goals for IV&V within the ERA program

- Ms. Gableman outlined the IV&V tasks performed during the Requirements Phase

- Ms. Gableman continued by providing a brief on results found for each task

- Ms. Gableman concluded with a summary of the assessed quality factors categorized according to development related factors (e.g. requirements, documentation, etc.) and system and product related factors. The overall quality assessment was "green-yellow" for this phase, within acceptable levels of quality.

6. ERA Design Document Discussion

Thibodeau opened the discussion with a brief description of three (3) primary requirements of the ERA system:

1. Scalability,
2. Evolvability, and
3. Extensible.

Thibodeau then asked the committee if they thought that after reading the Design Document if they felt it met ERA's requirements.

Kahn asked the members if the document describes the architecture and addresses what NARA needs ERA to be. What things need to be added for clarity and are there fundamental things that jump out.

Horton: With the concept of bundling, how many manifestations would there be? Will the ERA architecture allow multiple systems?

Thibodeau: There is a requirement for a separate system and separate air gap systems for security reasons.

Horton: With different manifestations, how specialized will the system get?

Thibodeau: ERA will have tailored workbenches on the portal; for teachers, students, NARA staff – they are role based.

Hansen: There are two (2) ways to tailor the system. In the case of the Presidential records, you could:

1. Build a service and deploy it to one (1) or all or
2. Tailor the workflow through orchestrations.

Woestram: Will users come in through different ways?

Hansen: Yes, the concept is similar to using different engines to execute a general search versus a key word search. Users make the choice. You can control the exposure per user or use a common code base across the services.

Testa brought up the issue of software rights and the challenge of proprietary software in systems.

Thibodeau indicated that he has seen this challenge in the Navy records generated by their proprietary Computer Aided Design (CAD) system.

Testa added that the challenge of accessing these records is the challenge of the owner and not NARA.

Thibodeau: NARA will work with the customer to determine the best way to preserve data if proprietary software is an issue.

Pearces-Moses: From a business view or Service Oriented Architecture (SOA) view, how do you bundle services?

Horton: You could build the services first, by instance. For example, build the Presidential Library service first.

Phillips: We need to see the NARA data architecture and the ERA Domain Model. The lack of seeing them made it difficult to analyze the design.

Action Item #2: Provide to the committee members the NARA data architecture and ERA Domain Model.

Maltz: There is a reference to metadata standards but I didn't see it.

Thibodeau: NARA has a standard.

Maltz: There are different registries out there. Where does NARA's standard fit in?

Phillips: How will ERA relate to change in metadata standards?

Kahn: We will hear during tomorrow's presentation on the ADL Program about how the linkage of these standards will work, what will be the real technical challenge, and what needs to be mandated or it won't happen.

Open Architecture is about Interfaces, Protocols and Objects (IPOs). I don't see such IPOs highlighted in this design. It would be a major decision to go down that path at this time.

Phillips referred the committee to the 10 requirements listed in the Design Document.

Thibodeau: There are trade offs on what you can do on all the requirements based on funding.

Hunter: There should be a concrete way to rate and rank priorities.

Thibodeau: The requirements are guidelines.

Pearce-Moses: You need all of the requirements but they have scaled them.

Horton: Measuring requirements can be based on audience.

Pearce-Moses: Trace system failure back to requirements. Make them more quantifiable. More oversight will be able to determine success/failure. These requirements are fuzzy.

Weinstein: How do we reduce the fuzz?

Phillips: Give us a measure of a good method to get requirements or measure of a good SOA to use.

Thibodeau: These requirements were developed through five (5) iterations with NARA staff. We developed 42 use cases and floated the requirements to the public. We held a User Conference and sent teams out nationwide to talk with users. We also attended conferences around the nation. Thirty percent of the LMC performance fee is based on NARA's success in the use of the system.

Kahn: The expectation is that a lot of agencies will have access. Agencies will have to decide how to transfer data. I suggest NARA create a standard way to get records. Then, NARA will sit down with each agency to refine the process. It's an engineering job to stage data for the system.

Phillips: It's all part of the roll out plan. For example, put CAD/CAM data off until later. You need a good model initially. You can't do everything at once.

Kahn: How do we plan for that?

Thibodeau: We are dealing with the CAD/CAM issue in Research. We are working with UNIMACS and their PAWN tool to gather data. NARA has also issued six (6) new transfer formats to bring data into NARA.

Phillips: You need to get your wins up front. I don't understand the roll out well enough to know if the design meets it.

Campbell: You may need to change the approach and start out with meeting a specific goal first.

Kahn: I second that idea. One big problem is email; White House email. Have all the records come in by email. It's a simple way of dealing with interoperability problem but it is also a big metadata problem.

Redgrave: You'll have hundreds of law suits on day one. You should focus on the GOP records first. It's a high risk.

Kahn: Then what do you announce at IOC?

Weinstein: Email is a tough place to start. Presidential records will be accessible for litigation through FOIAs.

Bellardo: Lew ask LMC for a response to a comment made on the Design Document that it doesn't portray a "plug and play" design.

Hansen: What are your expectations?

Kahn: An open architecture allows independent systems to connect using standard known interfaces, protocols and objects. The requirements document for the internet is not like the requirements document for the ERA system that starts with modules. I recommend starting with an open architecture.

Hansen: There are constraints such as accreditation with national security to consider.

Kahn: It's a matter of decision and getting the security people to choose appropriate specifications and standards.

Testa: That's why DoD is moving towards dark fiber.

Kahn: You can have a system that's open, allowing plug and play, but you can also make the decision not to grant access to it.

Clyde Relick: There is a fundamental problem related to the agreement of the contract.

Bellardo: I need some clarification on the LMC code that's within the system.

Relick: Some of the framework of the design is publishable, for example, Digital Adaptors for preservation and search engines. There is openness. The boundary was drawn by the contract.

Kahn: It's a NARA issue.

Relick: If there is additional openness that can be built into the system, we'd like to know about what it is for later increments.

Kahn: Whenever the Design Document talks about the "little arrow" (symbol used to denote interface with LMC code), I'd like to know what's inside the box. For example, what role do identifiers play in this design? If someone else built a module and wanted to plug it into ERA, would they be able to?

Hansen: ERA has an Object Identity Service that generates a number schema. If you want to use it in another system, LMC will expose the call. You can call it externally and then run a security check.

Kahn: A Persistent Identification system is a most important paradigm to have right at the top. The ERA Design Document is inverted.

Thibodeau: LMC had to show NARA how they would meet business needs.

Kahn: I'm talking about how to view the system.

Hunter: I'm hearing different interpretations of "open"; open, open source, and open specification.

Geer: It is difficult to determine with this architecture if it meets the requirement of evolvability. Are you satisfied?

Thibodeau: The vision of new technology is difficult to know.

Hansen: LMC did not attempt to invent new ways.

Kahn: LMC is building a system to meet NARA needs. We need to ask if the requirements really right for the long haul? For example, will it be interoperable with other archives around the world? The question is on the table for NARA is how long range are you looking? From day one, I'd have started with an open architecture but it doesn't make sense now. All we can do is give our comments on the current program and convey what we think should be happening. It's up to NARA to decide how to proceed.

Kahn closed the meeting at 5:00pm.

7. Action Items for Next Meeting: Committee members

Please see the remaining open action items listed in the ACERA Open Action Items file posted on Core.gov.

8. ADJOURNMENT

The meeting adjourned at 5:00 p.m.

I herby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Adrienne M. Reagins
Secretariat
Advisory Committee on the Electronic Records Archives

Robert Kahn, Ph.D.
Chairman
Advisory Committee on the Electronic Records Archives

These minutes will be formally considered by the Committee at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.